UPGRADING YOUR

Alegra™

TO
2 MEGABYTES

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UPGRADING YOUR ALEGRA
TO 2 MEGABYTES

This sheet contains the steps required to upgrade your **Alegra** to 2 megabytes of RAM. Although it is a relatively simple procedure, we recommend that you thoroughly read this section and follow these basic rules:

1) Only use an IC removal tool to extract the parts being replaced.

2) Keep handling of the parts to a minimum. **DO NOT TAKE THE ICs OUT OF THEIR PROTECTIVE TUBE UNTIL YOU ARE GOING TO INSTALL THEM!!!**

3) Double check everything. An improperly installed IC will cause **Alegra** to malfunction and could damage the IC.

4) Refer often to the diagram.

5) **LET YOUR DEALER DO THE UPGRADE IF YOU DO NOT FEEL COMFORTABLE DOING IT YOURSELF.** Access Associates will not be responsible for ICs that are damaged by improper installation.

I. SETUP
You will need the following to do the upgrade:

1) **Alegra** 2 Meg Upgrade Kit.

2) Sixteen 1 megabit, 120 nanosecond CMOS DRAMs. (Toshiba TC51000C-12 or equivalent).

3) A small (#0) phillips screwdriver.

4) An IC removal tool.

II. IC REMOVAL and REPLACEMENT

1) Turn off your **Amiga**. **DO NOT ATTEMPT TO RE-MOVE OR INSTALL ANYTHING WITH THE POWER ON!**

2) Carefully remove **Alegra** from your **Amiga**.

3) Compare **Alegra** to the diagram. Notice the row of 16 ICs in sockets that go across the top of the board. These are the DRAMs. Take note of their positions in the sockets (position A). The 1 meg DRAMs will be placed into the "other" position (position B) after the 256K DRAMs are removed.

4) Use the IC removal tool to carefully remove all the 256K DRAMs. Set them aside.

5) Take a 1 Meg DRAM from the tube. Look to see that none of the pins are bent. Carefully straighten any that you find.

6) Using the diagram as a guide, find the end of the IC with the notch. Pin 1 is on the left side of the notch.

7) Gently insert the DRAM into an open socket at position B with pin 1 on the top left side of the IC. This is very important, as DRAMs installed upside down will be destroyed! **BE CAREFUL NOT TO BEND THE PINS UNDER THE CHIP.**

8) Repeat steps 5 through 7 until all 16 sockets are filled.

9) Inspect your work. Is pin 1 located in the top left corner of each IC? If so, then all the notches should be towards the top. Are all the DRAMs in socket position B? If so, then all the top edges of the DRAMs should form a horizontal line across the board. Are there any bent pins? Remove those DRAMs, straighten bent pins, and reinsert.

10) Locate the 2 socketed configuration ICs, U9 and U12. These can be found on the bottom of the board as shown in the diagram.

11) Remove the ICs at U9 and U12 using the IC removal tool.

12) Take the configuration ICs from the tube. Find the IC that has the number "311-14937" printed on the top in white ink.

13) Locate pin 1. Insert the IC into location U9 with pin 1 in the top left corner. Inspect your work.

14) Find the IC that has the number "311-14938" printed on the top in white ink.

15) Locate pin 1. Insert the IC into location U12 with pin 1 in the top left corner. Inspect your work.

16) Once again reinspect your work. If everything looks good, reassemble **Alegra** and reinstall it onto your system.
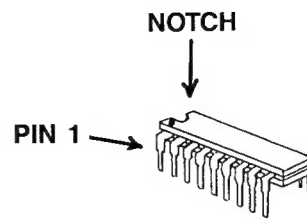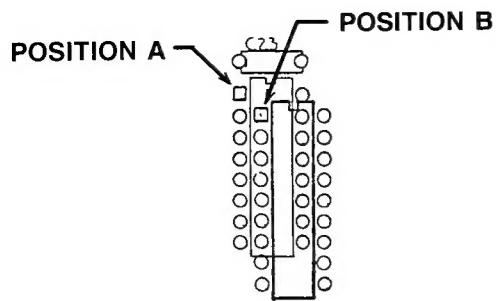
III. CONFIGURATION NOTES

If you are using **Kickstart 1.2**, there is nothing else to be done. However, for system disks that will be used with **Kickstart 1.1**, you must make a small change to your "Startup-Sequence" file. The command "addmem" must be given new address parameters to reflect the additional memory. Using your choice of text editor or word processor, make the following change:

1) Load the file "sys:s/startup-sequence" into the editor/word processor.

2) Find the command "addmem 200000 27fffe."

3) Change the line to read "addmem 200000 3fffe."

4) Save the file back to the disk.

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POSITION A · POSITION B

NOTCH

PIN 1

TOP

DRAMS

FRONT

BACK

DESIGNED BY
STEVE GRANT

U9

U12

CONFIGURATION DEVICES